

1 1. A replaceable filter cartridge for a standalone point of use water purification device,  
2 comprising:  
3 a housing having water inlet and water outlet ports that is adapted for removable  
4 insertion into said standalone point of use water purification device;  
5 said housing having interior walls providing a flow path extending between said water  
6 inlet and water outlet ports along which water to be treated moves through first and second fluid  
7 flow passageways containing flowthrough filter media that are adapted to operate in tandem such  
8 that said water to be treated first moves through said first passageway containing flowthrough  
9 filter media in a first, generally downward direction, and then moves through said second  
10 passageway containing flowthrough filter media in a second, generally upward direction, as it  
11 flows along said flow path between said water inlet and outlet ports;  
12 whereby, the water that moves along the second, generally upward direction soaks  
13 upwardly through the filter media contained in the second passageway, which reduces if not  
14 eliminates channeling, and the opposing first and second flow directions provide self-wetting of  
15 the filter media contained in the first and second flow passageways, eliminating the need for  
16 post-use wetting.

1 2. The replaceable cartridge for a standalone point of use water purification device of claim 1,  
2 wherein said housing includes mating, interfitting top and bottom housing modules fastened in  
3 water-tight sealing relation.

1 3. The replaceable cartridge for a standalone point of use water purification device of claim 2,  
2 wherein said top housing module includes a lid member having a slotted dome in fluid  
3 communication with a tube downwardly extending from the lid having an inside cylindrical wall  
4 providing said first passageway containing filter media.

1 4. The replaceable cartridge for a standalone point of use water purification device of claim 3,  
2 wherein said bottom housing module includes a generally cup-shaped base member having a  
3 generally cylindrical inside wall providing, together with the generally cylindrical outside wall of  
4 said tube, an annular second passageway containing filter media.

1 5. The replaceable cartridge for a standalone point of use water purification device of claim 3,  
2 further including means for externally mounting a filter to the dome of the lid member to provide  
3 pre-filtration.

1 6. The replaceable cartridge for a standalone point of use water purification device of claim 3,  
2 further including an inlet filter inside said top housing module to prevent leakage of filter media  
3 and control flow rate.

1 7. The replaceable cartridge for a standalone point of use water purification device of claim 4,  
2 further including an outlet filter inside said bottom housing module to prevent leakage of filter  
3 media and control flow rate.

1 8. The replaceable cartridge for a standalone point of use water purification device of claim 4,  
2 wherein said standalone point of use water purification device is a pitcher-type water purifier  
3 having a handle and pouring spout, wherein said water outlet is located to the top and one side of  
4 the bottom housing module, and further including a cartridge alignment tab carried by said  
5 bottom housing module that seats it when inserted into said pitcher purifier with its water outlet  
6 located to the side of the pitcher away from its pouring spout to prevent spillage of water from  
7 the cartridge when the pitcher is dispensing water.

1 9. A filter cartridge for a standalone point of use pitcher-type water purification device,  
2 comprising:

3 a filter housing wider than it is long adapted for removable insertion inside said  
4 standalone point of use pitcher-type water purification device;

5 said filter housing including exterior walls providing water inlet and outlet ports and  
6 interior walls providing a fluid flow path between said water inlet and outlet ports and, along said  
7 flow path, first and second flow passageways containing flowthrough filter media that cooperate  
8 to provide opposing first and second flow directions in the first and second flow passageways  
9 that reduce, if not eliminate, channeling, and to provide self-wetting of the flowthrough filter  
10 media contained in the tandem first and second flow passageways, eliminating the need for post-  
11 use wetting steps, as water moves along said flow path between said inlet and outlet ports.

1 10. The filter cartridge for a standalone point of use water purification device of claim 9,  
2 wherein said filter housing includes mating, interfitting top and bottom housing modules fastened  
3 in water-tight sealing relation.

1 11. The filter cartridge for a standalone point of use pitcher-type water purification device of  
2 claim 9, wherein said water outlet port is located at the back of said housing, and further  
3 including an alignment member carried by said housing to insure that its back faces away from  
4 the pouring direction of said standalone point of use pitcher-type water purification device.

1 12. The filter cartridge for a standalone point of use pitcher-type water purification device of  
2 claim 9, wherein said first flow passageway containing flowthrough filter media is a generally  
3 cylindrical flow passageway containing ion exchange and activated carbon flowthrough filter  
4 media, and wherein said second flow passageway containing flowthrough filter media is an  
5 annular flow passageway containing ion exchange and activated carbon flowthrough filter media  
6 surrounding said first, generally cylindrical flow passageway.

1 13. The filter cartridge for a standalone point of use pitcher-type water purification device of  
2 claim 9, wherein said opposing first and second flow directions in the first and second flow  
3 passageways are downwardly and upwardly opposing first and second flow directions.

1 14. The filter cartridge for a standalone point of use pitcher-type water purification device of  
2 claim 9, wherein said filter housing wider than it is long has a generally circular cross-section.